ABSTRACT

The invention relates to analytical chemistry and to quantitative immunochemical analysis, in particular, to a method for immunochemical quantitative detection of various biological toxins by using biological microchips. A biological microchip comprises an ordered array of three-dimensional hydrogel cells on a solid support, which are produced by a method of photo- or chemically induced polymerization and contain immobilized antibodies to various bacterial, plant and animal biotoxins, or biotoxins. The use of microchips makes it possible to analyze a sample simultaneously for the presence of several biotoxins. The proposed method for detecting biotoxins can be used in medicine, in food industry, and in environmental protection.